# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF DELAWARE

IN THE MATTER OF INTEGRATED RESOURCE	)
PLANNING FOR THE PROVISION OF	)
STANDARD OFFER SUPPLY SERVICE BY	)
DELMARVA POWER & LIGHT COMPANY UNDER	)
26 DEL. C. § 1007(c) & (d): REVIEW	) PSC DOCKET NO. 06
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AND APPROVAL OF THE REQUEST FOR	)
PROPOSALS FOR THE CONSTRUCTION OF	)
NEW GENERATION RESOURCES UNDER 26	)
DEL. C. § 1007(d)	)
(OPENED JULY 25, 2006)	

### Comments on the Redline RFP Jeremy Firestone and Willett Kempton 6 October 2006

1. BTU and Carbon Taxes should be amortized by the bidders that generate CO2; Not passed on to Delaware Ratepayers.

We cite sources that estimate the effect of CO2 emissions on price stability.

- A DOE-sponsored study by the University of Chicago on the cost of capturing CO2 (http://np2010.ne.doe.gov/reports/NuclIndustryStudy-Summary.pdf) estimated that the cost of capturing CO2 would be: "\$20 to \$44 per MWh for integrated gasification combined cycle, including an energy penalty of 6 to 21 percent".
- The range of recent prices on the European Market is the equivalent of \$15.23 to \$20.00 per metric ton. This price has fallen drastically recently due to an oversupply of carbon allowances but can be expected to rise over time.
- For the purpose of calculating avoided costs, The California CPUC projects carbon costs of \$17.50 per ton in 2013, and escalating thereafter. However, these figures are used for avoided costs credited to efficiency, rather than an analysis of rate impact, and do not cover the years after 2013.
- The US Energy Information Agency estimates the increases in electricity prices under proposed Federal laws regarding GHG emissions. They give an average percentage increase in electricity prices, averaged over the US, comparing two alternative Federal laws: "Relative to the reference case, the price of electricity increases less under SA.2028 (35 percent by 2025) than under S.139 (46 percent

by 2025)." (http://www.eia.doe.gov/oiaf/analysispaper/sacsa/index.html) Since these figures are averaged, including power plants other than coal, the increases in cost for coal power would be greater than this. This analysis was for legislation proposed in 2003 but not passed. However, we judge it extremely likely that legislation at least this strict will be passed prior to 2013, the projected opening date of the power plant.

Thus, during approximately mid-life of the plant, we should expect an IGCC coal plant to increase in cost by:

\$20 - \$44 /MWh over the "expected price"

Or for a mix of fossil plants, an increase of:

35% - 46% over the "expected price"

The "pass through" provision is simply a transparent cover for winning a bid on an artificially low price, then raising the price by up to 46% and passing that on to the ratepayers. Whether the low or high end of these real costs are realized, these increases clearly do not constitute price stability. Nor should they be borne by the ratepayers unless the costs are first internalized in a transparent bid that is ultimately approved, with risk borne by the bidder, which can be insured against.

Furthermore, because the impact of climate change on Delaware is much worse than the impact on the nation as a whole, and because Delaware has huge non-CO2 producing electricity resources at competitive prices, it is plausible that state law affecting fossil plants will be enacted if Federal law is not.

The Redline RFP departs from Delmarva's original in passing future carbon taxes on to the ratepayers. In "Comments Of NRG Energy, Inc. on Independent Consultant's Report", p 9-12, NRG requests that not just carbon taxes, but all potential costs and regulations pertaining to CO2 should be passed on to the ratepayers. If any CO2 costs are not passed on to the ratepayers, they argue, it may not be feasible to continue to operate a coal power plant. Any pass through, whether of carbon taxes or the additional carbon costs of concern to NRG, is antithetical to the HR6 purpose of price stability, and to the mission of the Delaware PSC.

The cost of any and all future carbon emissions must be covered by the bidder and his insurer. Otherwise, bidders of CO2-producing facilities have no motivation to validate whether CO2 separation and sequestration are feasible at the sites they pick, nor to actually implement them. Delaware, more than any other state, has a pressing interest in controlling CO2 – the current language, which encourages bidders to emit CO2, and removes all their incentive for controlling CO2e. It is also contrary to both the price stability and environmental goals of HR 6.

#### 2. Price and the Reduction of Environmental Impacts.

As we have previously noted, price is not a criterion under which the Legislature chose to have bids considered and does not enter the front end of the calculation as suggested by Delmarva and the private consultant. There is no reason to fear this outcome as the Legislature wisely included price concepts in the process. First, the principal criterion is price stability. Second, for those proposals that are feasible (what we would call stage one analysis) and that are "effective" (stage two)—that is, that provide for stable prices and reduce environmental impacts, particularly air emissions, to *de minimis* amounts, the Legislature directed the Commission to select only those proposals that are cost-effective (stage three). Once bids are evaluated under the RFP process, price is considered in deciding among acceptable RFP bids and other ways in which to meet long-term power supply such as demand-side management, spot market purchases, etc. under the IRP process.

Weighting price more than the environment suggests that a \$.01/kWh reduction in price is more highly valued than a \$.01/kWh environmental benefit. There is no rational basis for this belief, however, and certainly no rationale has been put forward by Delmarva or the private consultant. On the contrary, there is reason to believe that the value assigned to environmental benefits is greater than price, since only Delmarva ratepayers will benefit from price, while a much greater number of people will benefit from the reduction in environmental impacts. Not only will all of Delaware residents benefit from reductions in priority pollutants, but regionally, others will benefit from non-CO2 producing production given the RGGI, and globally, there will be benefits from both non-CO2 production and non-SO2 production. Thus, if anything, the weights on price and on reductions in environmental impacts should be reversed, and in any event, the weight on price should not be more than the weight on reductions in environmental impact.

#### 3. Quantification and Weighting

As noted by Delmarva, the private consultant "suggested identifying whether the impacts are high, medium, or low" rather than establishing an objective standard. Delmarva recommended establishing specific levels of emissions per MWh" to decide "whether the impact are 'high, medium or low', and thus assign points for the GHG and EPA criteria pollutant items." While we generally agree with Delmarva, there should be more than three ratings categories as there is the possibility on wide differences in emissions per mWh. We suggest a 0 to 5 scale.

#### 4. Point Assignment (2.5).

The redline RFP provides that specifics of bid evaluation methodology, assumptions, scenarios, and system to convent results to point scores "will be developed by Delmarva

and its consultant and be approved for use by the State Agencies and their Independent Consultant prior to the receipt of bids." There are a number of problems. First, the Independent Consultant should not have approval authority. Second, the methodology, the system to convert results to point scores, etc., chosen may be as important, if not more, than the scoring system set forth in the RFP. As such, the public should have a role in this process. We rely on our earlier comments for allocation of points that is consistent with the law.

#### 5. Confidentiality (2.5)

The redline RFP provides that there may be both public and confidential versions of the report (2.5). All portions of the report, other than those portions that are trade secrets and commercial or financial information obtained from a person that are privileged or confidential.

## 6. PPA Capacity Price (2.3.1).

As a point of clarification, we take it that capacity factor adjustments if needed, will ultimately be under the control of the Commission and the Energy Office rather than Delmarya.

Respectfully submitted,

Jeremy Firestone Willett Kempton